

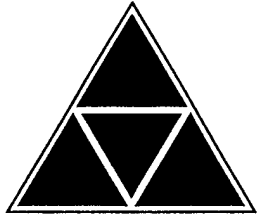
Unique C4I Platforms

AIR BUOYANT SYSTEMS

Presented by
Information Systems Division

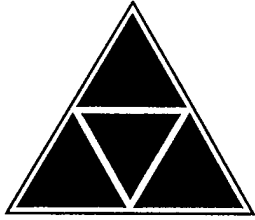


MCA Research Corp.



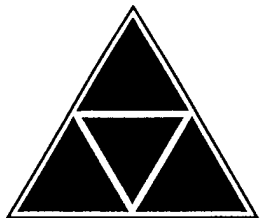
Air Buoyant Systems (ABS)

- **Unmanned Dirigibles Carrying a Platform for C4I Systems**
- **Theater-wide Coverage with Fiber Optic Performance**
- **Operating Above 100,000 Ft.**
- **Recoverable for Technology Upgrades vs. Stranded Investment**



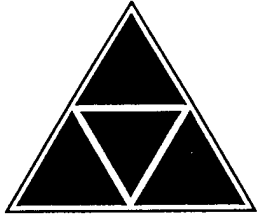
ABS Technology

- **Proven in the Early 70's but With Limited Deployments**
- **Increased Bandwidth Capacity Versus Traditional Satellite**
- **Less Sophisticated User Terminals With Smaller Footprint and Lower Operations & Maintenance Costs**



Alternatives to ABS

- **Traditional Satellites**
- **Low Earth Orbit Satellites**
- **Copper Land Lines**
- **Fiber Optic Land Lines**
- **Microwave Systems**
- **Traditional RF Systems**
- **Predator-Type Unmanned Aircraft**



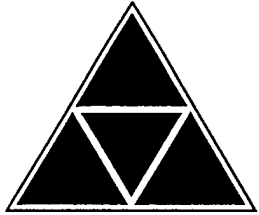
Components of ABS

- **Earth Station (Gateway)**

- Antenna, Power Plant, Transmitter
- Smaller Means Increased Mobility

- **Airborne Platform**

- Dirigible and Propulsion System
- C4I Systems Payload
- Station Keeping System
- Power Plant



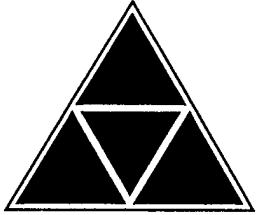
Components of ABS

- **User Terminals**

- Antenna, Transmitter
- Data - Laptops, Workstations, Networks
- Video - Workstations, Projection Devices
- Voice - POTS, Microphones, Speakers

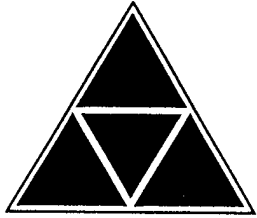
- **Operations Center**

- Network Management
- Station Keeping
- Maintenance



Benefits of ABS

- **Increased Data Capacity to Areas With Limited or No Service**
- **Cost Effective vs. the Alternatives**
- **Easily Repositioned**
- **Easily Maintained**



Benefits of ABS

- **Heavy Lift Allows Redundancy and Higher Reliability**
- **Can Carry Other Intelligence Gathering Packages**
- **Above Most Air Defense Umbrellas**